

(a) providing a plurality of successive offset lithographic sheet-fed printing stations for printing images on cut paper sheets;

(b) providing one or more flexographic printing stations prior to at least one of said offset lithographic stations for printing a flexographic image on each of said cut paper sheets, each of said flexographic printing stations comprising:

(1) a blanket cylinder, said blanket cylinder including a flexographic plate having an image thereon for transferring a flexographic image to said blanket cylinder;

(2) an anilox roller for applying a flexographic image to said flexographic plate on said blanket cylinder; and

(3) an impression cylinder in image-transferring relationship with said blanket cylinder for transferring said flexographic image from said blanket cylinder to said substrate;

at least one of said succeeding printing stations being a lithographic printing station using offset lithography for printing additional images on top of said flexographic image on each sheet; and

(c) providing a high-velocity air dryer associated with the impression cylinder of each flexographic printing station for drying the flexographic image printed on each sheet.

92. The method of Claim 91 wherein the printing of the flexographic image is accomplished by the anilox roller being mounted in an auxiliary retractable coater unit adapted to engage said flexographic plate on said blanket.

93. The method of Claim 91 wherein the printing of the flexographic image is accomplished by the anilox roller being mounted in a dedicated flexographic printing station.

94. Method of combining offset lithographic and flexographic printing in a continuous in-line sheet-fed process, combining the steps of:

(a) providing a plurality of successive offset lithographic sheet-fed printing stations for printing images on one or both sides of each of a succession of cut paper sheets;

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(b) providing one or more flexographic stations prior to at least one of said offset lithographic stations for printing a flexographic image on one side of each of said cut paper sheets, each flexographic printing station comprising:

- (1) a blanket cylinder, said blanket cylinder including a flexographic plate having an image thereon for transferring a flexographic image to said blanket cylinder;
- (2) an anilox roller for applying a flexographic image to said flexographic plate on said blanket cylinder; and
- (3) an impression cylinder in image-transferring relationship with said blanket cylinder for transferring said flexographic image from said blanket cylinder to said substrate;

(c) providing at least one succeeding printing station being a lithographic printing station using offset lithography for printing or more images on the reverse side of the side on which said flexographic image was printed; and

(d) providing a high velocity air dryer associated with the impression cylinder of each flexographic printing station for drying the flexographic image printed on each sheet.

95. The method of Claim 94 wherein the printing of flexographic images is accomplished by the anilox roller being mounted in an auxiliary retractable coater unit adapted to engage said flexographic plate on said blanket cylinder.

96. The method of Claim 91 wherein the printing of flexographic images is accomplished by the anilox roller being mounted in a dedicated flexographic printing station.

97. Apparatus for a combined lithographic and flexographic printing process for printing a multicolored image on a succession of sheets comprising:

(a) a plurality of successive printing stations for printing an image on a succession of sheets in a continuous in-line process, said printing stations including both lithographic and one or more flexographic printing station;

(b) each of said flexographic printing stations having:

- (1) a blanket cylinder, said blanket cylinder including a flexographic plate having an image thereon for transferring a flexographic image to said blanket cylinder;

(2) an anilox roller for applying a flexographic to said flexographic plate on said blanket cylinder; and

(3) an impression cylinder in an image-transfer relationship with said blanket cylinder for transferring said flexographic color image from said blanket cylinder to each of the succession of sheets;

at least one of said succeeding of printing stations being a lithographic printing stations using offset lithography for printing additional images on top of said flexographic image; and

(c) a high velocity air dryer associated with the impression cylinder of each flexographic printing stations for quickly drying the flexographic image printed on each sheet.

98. The apparatus of Claim 97 wherein the printing of flexographic images is accomplished by the anilox roller being mounted in an auxiliary retractable coater unit adapted to engage said flexographic plate on said blanket cylinder.

99. The apparatus of Claim 97 where in the printing of flexographic images is accomplished by the anilox roller being mounted in a dedicated flexographic printing station.

100. Apparatus for a combined lithographic and flexographic printing process for printing multicolored images on a succession of sheets, comprising:

(a) a plurality of successive printing stations for printing images on one or both sides of a succession of sheets in a continuous in-line process said printing stations including both lithographic and one or more flexographic printing stations;

(b) each of said flexographic printing stations having;

(1) a blanket cylinder, said blanket cylinder including a flexographic plate having an image thereon for transferring a flexographic image to said cylinder;

(2) an anilox roller for applying a flexographic image to said flexographic plate on said plate cylinder; and